

National Aeronautics and
Space Administration
Goddard Space Flight Center

Inside Wallops

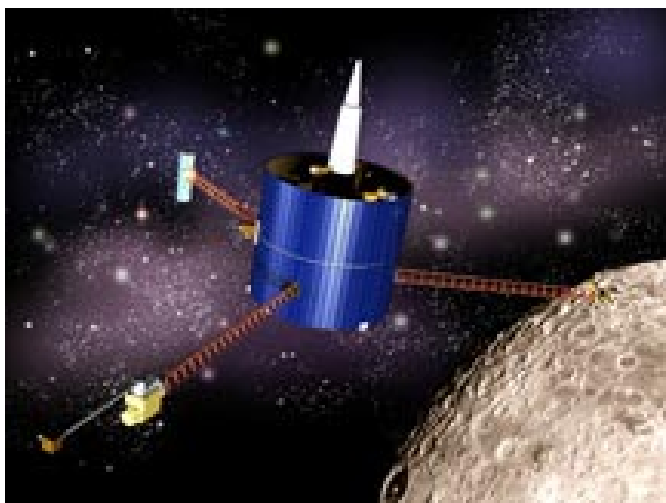
Wallops Flight Facility, Wallops Island, Virginia

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Lunar Prospector Launch Rescheduled

Launch of NASA's Lunar Prospector mission to explore the Moon has been rescheduled from late September to November 23.

The schedule change occurred because additional time is needed to complete testing and preparation of the new Lockheed Martin LMLV2



launch vehicle. The launch, occurring from Launch Complex 46 on Cape Canaveral Air Station, is the first for the LMLV2.

The Lunar Prospector is the first competitively selected venture in NASA's Discovery program series of "faster, better, cheaper" space science exploration missions. The entire mission, including the 660 pound

spacecraft, its launch vehicle, science instruments and data operations and delivery, has been developed at a total cost of \$62.8 million.

Following its launch and cruise to the Moon, Lunar Prospector will orbit above the Moon's surface at an altitude of approximately 63 miles during a one-year mapping mission. Its five science instruments will provide detailed data on the composition and gravity field of the entire lunar landscape, of which more than 75 percent remains virtually unexplored. One key mission objective is to provide direct evidence of the presence or absence of ice in the shaded regions of the lunar poles.

The Lunar Prospector mission is being managed by the Ames Research Center through a prime contract with Lockheed Martin Corp.

For further information on Lunar Prospector, the Internet address is: http://pyroeis.arc.nasa.gov/lunar_prospector/home.html

NASA Researching Engine Airflow Controls

NASA conducted flight demonstrations in August of an advanced high-stability engine-control system that is expected to increase significantly future propulsion system performance in both military and commercial aircraft turbine engines.

Under the High Stability Engine Control Project, Lewis Research Center and Dryden Flight Research Center are working together to evaluate a computerized system that can sense and then respond to high levels of engine inlet airflow turbulence or distortion, thereby preventing sudden in-flight engine compressor stalls and potential engine failures.

The system, called Distortion Tolerant Control, incorporates an aircraft mounted, high-speed processor that senses changes in airflow at the front of the engine and allows the system to automatically command trim changes to the engine to accommodate changing distortion conditions. This

allows the engines to operate with more stability under adverse or turbulent airflow conditions.

"The primary benefit of Distortion Tolerant Control is its ability to set the stability margin requirement on-line and in real-time," said John DeLaat, program manager at Lewis. "This can allow the built-in stall margin to be reduced, which can then be traded for increased performance, decreased weight, or both. The result will be higher-performance military aircraft and more fuel-efficient commercial airliners," he added.

The High Stability Engine Control system was flight tested at Dryden on a highly modified F-15 jet, which is exploring a variety of advanced control system technologies. The F-15's right engine was heavily instrumented for the engine experiment, while its left engine remained in the standard configuration.



Ed White (CSC) machines an aft skin section for a payload to be carried from Puerto Rico on a Black Brant V sounding rocket in February 1998. The Coqui Dos Campaign is a co-operative study of atmospheric turbulence and sporadic ionization layers by NASA, the National Science Foundation, the Arecibo Observatory and various universities. The campaign includes the launching of 11 sounding rockets from Tortuguero, on the north coast of Puerto Rico, from February through April 1998. PAO Digital Photo

Wallops News Shorts

Three NASA sounding rockets were successfully launched within a 14 hour period September 9 and 10 from Australia and the White Sands Missile Range.

The third of four Terrier-Improved Orion vehicles in support of the U.S. Department of the Army's Down Under Early Warning Experiment was launched at 10 p.m. EDT, September 9 from Anna Plains Station, Australia. The payload manager was Bruce Scott (Code 823).

Two Black Brant IX sounding rockets were launched at 10:40 a.m. and 11:10 a.m. EDT September 10 from White Sands. Both vehicles carried microgravity payloads for the Lewis Research Center. Both payloads were recovered. The payload managers were Rob Maddox (CSC) and Chris Shreves (Code 823).

Of Special Note.....

The Comet Hale-Bopp Sounding Rocket Campaign is featured in the October issue of *Astronomy Magazine*.



The Wallops Morale Activities Committee invites you to share in the excitement of the Maryland Renaissance Festival. This is an opportunity to go back in time to “Merry Olde England”.

The Festival, running through October 19, will be in Crownsville, MD, which is close to Annapolis. The MAC trip to the Festival is scheduled for September 27. Carpools will be arranged.

The cost is \$9.50 for adults and \$4.25 for children. Tickets are on sale in the Exchange, located in the front of the Cafeteria.

For further information or to join a carpool call Pat Pruitt, x1251. Information on the Renaissance Festival also can be found at the following address: <http://www.rennfest.com>

Get The Right Prescription

When a doctor prescribes medicine, it is important to get the facts. The following is a checklist of questions to ask your doctor and/or a pharmacist. Parents also should ask these questions for their children.

- Why has this medication been prescribed?
- How do I take the medication?
- Do I take the medication with or without food?
- Can I take this medication with other medication?
- What time of day should I take the medicine?
- How much/how many should I take and how often should I take it?
- How long do I have to take the medicine?
- Are there short term or long term side effects?
- What should I do if I experience side effects?
- Should I avoid alcohol or certain foods while taking this medication?
- Are there generic medications for my condition that would be less expensive?
- If I have a question, who should I call in the office? What are the best times to call?

Make Sure The Smoke Detector Is Working

Safety experts agree that with the increased use of smoke detectors, residential fire deaths have declined. However, homes with smoke detectors that do not work outnumber homes with no smoke detectors at all. This was a major finding of the National Smoke Detector Project, which was sponsored by the U.S. Consumer Product Safety Commission, the U.S. Fire Administration, the National Fire Protection Association and the Congressional Fire Services Institute.



Other findings of the project include:

- Low-income households are more likely to have no working smoke detectors.
 - Reasons for non-working detectors include disconnection due to unwanted or nuisance alarms, dead or missing batteries, debris buildup and component failure due to age, corrosion or other reasons.
- There have been a number of advances made in smoke detectors. One advance is the introduction of long-life batteries that last for the life of the detector. In order to reduce the tendency to remove batteries because of nuisance alarms, some companies now offer a convenient feature to temporarily silence the alarm. Ongoing research is focusing on ways to eliminate nuisance alarms by applying electronic logic that could discriminate between a fire and a non-fire.

Before the heating season arrives, check all the smoke detectors in your home, make sure the batteries are working and installed properly. The Wallops Fire Department is available to answer questions concerning fire safety. Call the Fire Chief, x1720.

Wanted

Looking to start a new carpool from Salisbury or replenish an existing one? Call Charlie Cathell, x1239.

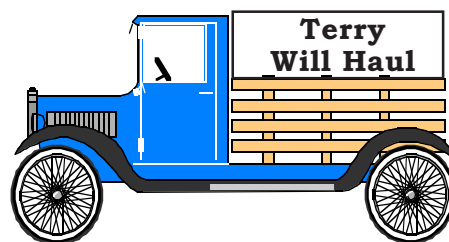
Course Reminder

A Center-funded course, “Listening and Memory Development”, will be offered at Wallops from 8:30 a.m. to 4:30 p.m., September 30-October 1.

This course outlines proven strategies for improving listening and memorization skills using imagery, association and the differentiation of facts and inferences.

For further information call Sherry Kleckner, x1204.

Tailgate—Trunk Sale



Fall is rapidly approaching. It's time to clean out those old Halloween decorations, gawky jewelry and ski boots that no longer fit.

Load up the trunk of your car, back of your pick-up truck or the family van and bring in whatever attic “treasures” you have on September 24. The tailgate—trunk sale will be from 11 a.m. to 1 p.m. in the parking lot behind the Flag Court.

This sale is for Wallops employees only and will not be open to the general public. Be advised that leave regulations apply if your participation extends beyond the normal lunch break.

For further information or to reserve a free spot, call Charlotte Williams, x1483.

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